

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/842,471	04/26/2001	Roger Kenneth Abrams	RPS920010007US1	7993
45211	7590 11/18/2005		EXAMINER	
KELLY K. KORDZIK WINSTEAD SECHREST & MINICK PC		TRAN, MYLINH T		
PO BOX 50784			ART UNIT	PAPER NUMBER
DALLAS, TX 75201			2179	

DATE MAILED: 11/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.



Commissioner for Patents United States Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450 www.uspto.gov

# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

MAILED

Application Number: 09/842,471

Filing Date: April 26, 2001

Appellant(s): ABRAMS, ROGER KENNETH

NOV 1 9 2005

**Technology Center 2100** 

Robert A. Voigt For Appellant

**EXAMINER'S ANSWER** 

This is in response to the appeal brief filed 09/06/05 appealing from the Office action mailed 06/29/05.

Art Unit: 2179

#### (1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

### (2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

#### (3) Status of Claims

The statement of the status of claims contained in the brief is correct.

#### (4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

#### (5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

#### (6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

#### (7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

#### (8) Evidence Relied Upon

5,598,183 Robertson et al. 01/28/1997

# (9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

# Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-55 are rejected under 35 U.S.C. 102(b) as being anticipated by Robertson et al. [US. 5,598,183].

As to claims 1 and 17, Robertson et al. teaches a computer implemented method and corresponding apparatus for improving a selection of a graphic user interface (GUI) icon with a pointing device comprising the steps/means for acquiring data corresponding to a motion of a pointing cursor on a display, said motion of said pointing cursor corresponding to a pointing device used to move said pointing cursor from a first source position to a first destination position on said display (column 1, lines 43-57 and column 2, lines 25-37); generating a set of motion vectors corresponding to said motion of said pointing cursor from said first source position to said first destination position (column 2, lines 44-56 and

Art Unit: 2179

column 11, lines 8-51), and storing said set of motion vectors and said first destination position referenced to said first source position (column 1, lines 43-57 and column 4, lines 42-67).

As to claims 2, 18, 34, 47, 50 and 53, Robertson et al. also disclose generating, within an application program, a first motion vector for said pointing cursor on said display as said pointing cursor moves from a second source position in response to a motion of said pointing device (column 2, lines 44-56 and column 11, lines 8-51); predicting a destination point icon in response to a compare of said second source position to a corresponding stored source position or a source position proximate to said second source position, wherein said corresponding stored source position which compares to said second source position also has stored said first motion vector or a motion vector proximate to said first motion vector (column 9, line 41 through column 10, line 5); and highlighting said destination point icon (figure 3B, column 11, lines 8-28). As to claims 3, 5, 11, 14, 19, 21, 27, 30, 41, 44, 48, 51 and 54, the claims are analyzed as previously discussed with respect to claim 2 except for the feature of "the highlighted destination point icon is actuated by a user of said pointing device". Robertson et al. shows the feature at figure 3B, column 11, lines 8-28. As to claims 4, 20, 35, 49, 52 and 55, the claims are analyzed as previously discussed with respect to claim 2 except for the feature of "modifying a motion" of said pointing cursor to more nearly follow ideal motion vectors from said first

Art Unit: 2179

source to said destination point icon". Robertson et al. teaches the feature at column 11, lines 8-50 and column 8, line 67 through column 9, line 13.

As to claims 6, 22 and 36, Robertson et al. also teach said display corresponding to a graphic user interface (GUI) (figures 3C-3D, column 3, lines 30-50).

As to claims 7, 8, 23, 24 and 37-38, Robertson et al. provide first source position being a position of a predetermined source point icon and said first destination position being a position of a predetermined destination point icon (column 3, lines 30-50).

As to claims 9, 25 and 39, Robertson et al. also provide motion vectors being generated each time said motion starts from a motion stop (column 10, line 55 through column 11, line 8). Robertson stores all the positions that the cursor passes through and generates a set of vectors from all these positions from the first position through the destination position (see column 1, line 44 through column 2, line 36). So, the destination position of the first vector is the source position of the second vector and the destination position of the second vector is the source position of the third vector. Therefore, Robertson teach "wherein another of said motion vectors is generated each time said motion starts from a motion stop".

As to claims 10, 26 and 40, Robertson et al. demonstrate motion vector comprising parameters defining a pointing cursor average velocity, starting position, stopping position, and motion direction. However, it would have been

Art Unit: 2179

inherent that when the system generates a set of motion vectors corresponding to said motion of the cursor from the first position to the second position, it also teaches parameters to define the velocity, starting position and motion direction. How can the system generate the motion vector without these parameters? As to claims 12, 28 and 42, Robertson et al. also demonstrate said set of motion vectors being associated with said first source position and source said first source position, source positions proximate to and said first destination position and destination positions proximate to said second position (column 6, lines 24-60). By moving from one position to another position, it would have been inherent that Robertson's system generates a set of motion vectors corresponding to said motion of the cursor from the first position to the second position. Therefore, the motion vectors have to be associated with the source and destination positions.

As to claims 13, 29 and 43, Robertson et al. disclose said second source position corresponding to a position of a source point icon (column 5, lines 8-55).

As to claims 15, 31 and 45, Robertson et al. also disclose pointing cursor locking to said destination point icon until a motion vector indicates a more likely destination point icon (column 11, lines 5-50).

As to claims 16, 32 and 46, Robertson et al. show said pointing cursor motion proceeding from said first source position to said destination point icon corresponding to an ideal motion vector, said ideal motion vector motion

changed only if a new destination point icon is determined (column 8, line 67 through column 9, line 13 and column 11, lines 5-50).

As to claim 33, the claim is analyzed as previously discussed with respect to claim 1 except for a central processing unit, a random access memory, a communications adapter coupled to a communication network, an I/O adapter and a bus system coupling said CPU to said ROM, said communication adapter, said I/O adapter, and said RAM. Robertson et al. shows these limitations at column 3, line 50 through column 4, line 15.

#### (10) Response to Argument

#### A. The Robertson Reference:

Robertson's invention relates to determine an intended cursor location on the computer display screen and automatically repositions the cursor at the intended location (abstract). Prediction means for predicting an intended user destination of the cursor on the display are disclosed throughout the Robertson's invention. The Robertson's invention describes a first storage area storing the position data corresponding to a first position of the cursor in the first screen display and a second storage area storing the position data corresponding to at least the first intended position of the cursor in the second screen display (columns 1-2). The system of Robertson compares the current cursor position with the stored cursor position and determines the direction of cursor movement based on the current cursor position and a stored cursor position (column 9, lines 42-67).

Art Unit: 2179

# B. Appellant's Arguments:

1) Appellant has argued that Robertson et al. do not disclose "generation a set of motion vectors corresponding to said motion of said pointing cursor from said first source position to said first destination position". However, the examiner respectfully disagrees because Robertson shows the cursor moving is from a first place to a second place. By moving from one position to another position, it would have been inherent that Robertson's system generates a set of motion vectors corresponding to said motion of the cursor from the first position to the second position. Besides, every time the cursor moves to a new position, the system stores that position of the cursor. So, the system stores all the positions that the cursor moves to (column 1, line 43 through column 2, line 37 "A first storage area stores the position data corresponding to a first position of the cursor...A second storage area stores the position data corresponding to at least the first intended position of the cursor"). Robertson stores all the positions that the cursor passes through and generates a set of vectors from all these positions from the first position through the destination position (see column 1, line 44 through column 2, line 36). So, the destination position of the first vector is the source position of the second vector and the destination position of the second vector is the source position of the third vector. Therefore, it is clearly that Robertson generates a set of motion vectors corresponding to said motion of said pointing cursor from said first source position to said first destination position.

Page 8

Art Unit: 2179

Applellant argues Robertson does not disclose "storing said set of motion vectors and said first destination position referenced to said first source position". However, the examiner respectfully disagrees because Robertson shows the feature at column 1, lines 45-55 by citing "A first storage area stores the position data corresponding to a first position of the cursor... A second storage area stores the position data corresponding to at least the first intended position of the cursor". Every time the cursor moves to a new position, the system stores that position of the cursor. So, the system stores all the positions that the cursor moves to. Therefore, the Robertson's system stores all the positions that the cursor stops by when the cursor moves from the first position (source position) to the intended position (destination position).

Appellant also argues that Robertson does not disclose "predicting, within an application program, a destination point icon by comparing a motion vector imparted by a user to a pointing cursor to a previously acquired motion vector acquired from said user moving said pointing cursor". However, the examiner respectfully disagrees because Robertson shows the feature at column 2, lines 25-37 by citing "The prediction means predicts the intended user destination by examining cursor position data to determine a direction of cursor movement and determines whether the direction of cursor movement substantially coincides with a user selectable option, with the user selectable option being designated as the intended user destination if the direction of cursor movement substantially coincides with the user selectable option".

Art Unit: 2179

Robertson teaches the step of comparing by examining cursor position data. Robertson also shows a destination point icon at figure 3B (menu NEW is an icon). Appellant's attention is directed to figure 4, 108. Robertson generates and stores a set of motion vectors of the cursor (above). So, when the cursor moves to a new position and generates a new vector, the system compares the new vectors with the previous vector to determine the direction of the cursor movement and the final destination position.

Appellant argues Robertson does not disclose "generating, within an application program, a first motion vector for said pointing cursor on said display as said pointing cursor moves from a second source position in response to a motion of said pointing device". However, the examiner respectfully disagrees because Robertson shows the cursor movement is from a first place to a second place. By moving from one position to another position, it would have been inherent that Robertson's system generates a set of motion vectors corresponding to said motion of the cursor from the first position to the second position. Appellant's attention is directed to the lines "A first storage area stores the position data corresponding to a first position of the cursor... A second storage area stores the position data corresponding to at least the first intended position of the cursor". Therefore, the Robertson's system stores all the positions that the cursor stops by when the cursor moves from the first position (source position) to the intended position (destination position).

4. Appellant has argued that Robertson does not disclose "predicting a destination point icon in response to a compare of said second source position to a corresponding stored source position or a source position proximate to said second source position, wherein said corresponding stored source position which compares to said second source position also has stored said first motion vector or a motion vector proximate to said first motion vector". However, the examiner respectfully disagrees because Robertson shows the feature at column 2, lines 25-37 by citing "The prediction means predicts the intended user destination by examining cursor position data to determine a direction of cursor movement and determines whether the direction of cursor movement substantially coincides with a user selectable option, with the user selectable option being designated as the intended user destination if the direction of cursor movement substantially coincides with the user selectable option". Robertson teaches the step of comparing by examining cursor position data. Robertson also shows a destination point icon at figure 3B (menu NEW is an icon). Appellant's attention is also directed to figure 4, 108. So, when the cursor moves to a new position and generates a new vector, the system compares the new vectors with the previous vector to determine the direction of the cursor movement and the final destination position. Appellant's attention is also directed to column 9, lines 42-67 "In step 106, the system 10 gets the current cursor position. In step 108, the system 10 compares the current cursor position with the stored cursor position. In step 110, the system 10 determines the

Art Unit: 2179

direction of cursor movement based on the current cursor position and a stored cursor position. In decision 112, the system determines whether there is a control in the direction of cursor movement". So, when the cursor moves to a new position and generates a new vector, the system compares the new vectors with the previous vector to determine the direction of the cursor movement and the final destination position.

Page 13

- 5. Appellant argues Robertson does not disclose "highlighting said destination point icon". However, the examiner respectfully disagrees because Robertson shows the feature at figure 3B. "New", "Open" and "Close" are the destination point icons. Each of them is highlighted when the cursor moves to. Appellant's attention is directed to column 8, lines 20-35.
- 6. Appellant has argued that Robertson does not disclose "repeating said steps (a) through (c) until said highlighted destination point icon is actuated by a user of said pointing device". However, the examiner already responds these arguments. Please see above.
- 7. Appellant has argued that Robertson does not disclose "modifying a motion of said pointing cursor to more nearly follow ideal motion vectors from said first source position to said destination point icon". However, the examiner respectfully disagrees because Robertson generates a correction vector when the cursor moves out of a control region (column 11, lines 8-50).

The Robertson system discloses the motion of the cursor following a ideal motion by generating the correction vector to make a desired cursor movement.

Art Unit: 2179

8. Appellant has also argued that Robertson does not teach "wherein another of said motion vectors is generated each time said motion starts from a motion stop". However, the examiner respectfully disagrees because Robertson stores all the positions that the cursor passes through and generates a set of vectors from all these positions from the first position through the destination position (see column 1, line 44 through column 2, line 36). So, the destination position of the first vector is the source position of the second vector and the destination position of the second vector is the source position of the third vector.

Therefore, Robertson teach "wherein another of said motion vectors is generated each time said motion starts from a motion stop".

Page 14

- 9. Appellant argues the reference does not teach "wherein said motion vector comprises parameters defining a pointing cursor average velocity, starting position, and motion direction". However, it would have been inherent that when the system generates a set of motion vectors corresponding to said motion of the cursor from the first position to the second position, it also teaches parameters to define the velocity, starting position and motion direction. How can the system generate the motion vector without these parameters?
- 10. Appellant also argues Robertson does not show "wherein said set of motion vectors are stored in response to actuation said destination point icon". However, the examiner respectfully disagrees because the system stores all the positions that the cursor moves to (column 1, line 43 through column 2, line 37 "A first storage area stores the position data corresponding to a first position of

Art Unit: 2179

the cursor...A second storage area stores the position data corresponding to at least the first intended position of the cursor"). Robertson stores all the positions that the cursor passes through and generates a set of vectors from all these positions from the first position through the destination position (see column 1, line 44 through column 2, line 36). So, the destination position of the first vector is the source position of the second vector and the destination position of the second vector is the source position of the third vector. Therefore, it is clearly that Robertson generates a set of motion vectors corresponding to said motion of said pointing cursor from said first source position to said first destination position. Robertson shows the feature at figure 3B. "New", "Open" and "Close" are the destination point icons.

Page 15

Appellant argues that the reference does not disclose "wherein said set of motion vectors are associated with said first source position and source positions proximate to said first source position, and said first destination position and destination positions proximate to said first destination position". However, Robertson shows the cursor moving is from a first place to a second place. By moving from one position to another position, it would have been inherent that Robertson's system generates a set of motion vectors corresponding to said motion of the cursor from the first position to the second position. Therefore, the motion vectors have to be associated with the source and destination positions.

Art Unit: 2179

12. Appellant also argues Robertson does not disclose "wherein said second source position corresponds to a position of a source point icon".

However, the examiner respectfully disagrees because Robertson shows the feature at figure 3B. "New", "Open" and "Close" are the destination point icons.

Page 16

- 13. Appellant argues Robertson does not disclose "wherein said pointing cursor locks to said destination point icon until said destination point icon is actuated by a user". However, the examiner respectfully disagrees because the step of predicting the intended user destination happens before the system determines a direction of cursor movement (column 2, lines 25-36). Therefore, the pointing cursor locks to the destination point until the destination point icon is actuated by a user.
- 14. Appellant argues Robertson does not disclose "wherein said pointing cursor locks to said destination point icon until a motion vector indicates a more likely destination point icon". However, the examiner respectfully disagrees because the step of predicting the intended user destination happens before the system determines a direction of cursor movement (column 2, lines 25-36). Therefore, the pointing cursor locks to the destination point until the destination point icon is actuated by a user.
- 15. Appellant has also argued Robertson does not disclose "wherein said motion of said pointing cursor proceeds from said first source position to said destination point icon corresponding to an ideal motion vector, said ideal motion vector motion changed only if a new destination point icon is determined".

Art Unit: 2179

However, Robertson shows the cursor movement is from a first place to a second place. By moving from one position to another position, it would have been inherent that Robertson's system generates a set of motion vectors corresponding to said motion of the cursor from the first position to the second position. A correction vector tends to move the cursor motion becoming the ideal motion vector (see column 1, line 45 through column 2, line55). Robertson generates a correction vector when the cursor moves out of a control region (column 11, lines 8-50). The Robertson system discloses the motion of the cursor following a ideal motion by generating the correction vector until a desired destination position is found.

Page 17

Appellant has also argued Robertson does not disclose "modifying a motion of said pointing cursor as a user moves a pointing device corresponding to said pointing cursor in an attempt to move said pointing cursor from a source point icon to said predicted destination point icon". By moving from one position to another position, it would have been inherent that Robertson's system generates a set of motion vectors corresponding to said motion of the cursor from the first position to the second position. A correction vector tends to move the cursor motion becoming the ideal motion vector (see column 1, line 45 through column 2, line55). Robertson generates a correction vector when the cursor moves out of a control region (column 11, lines 8-50). Robertson generates a cursor movement following an ideal path to get desired destination point.

Art Unit: 2179

For the above reasons, it is believed that the rejections should be sustained.

Page 18

This examiner's answer contains a new ground of rejection set forth in section (9) above. Accordingly, appellant must within **TWO MONTHS** from the date of this answer exercise one of the following two options to avoid *sua sponte* **dismissal of the appeal** as to the claims subject to the new ground of rejection:

- (1) **Reopen prosecution.** Request that prosecution be reopened before the primary examiner by filing a reply under 37 CFR 1.111 with or without amendment, affidavit or other evidence. Any amendment, affidavit or other evidence must be relevant to the new grounds of rejection. A request that complies with 37 CFR 41.39(b)(1) will be entered and considered. Any request that prosecution be reopened will be treated as a request to withdraw the appeal.
- (2) **Maintain appeal.** Request that the appeal be maintained by filing a reply brief as set forth in 37 CFR 41.41. Such a reply brief must address each new ground of rejection as set forth in 37 CFR 41.37(c)(1)(vii) and should be in compliance with the other requirements of 37 CFR 41.37(c). If a reply brief filed pursuant to 37 CFR 41.39(b)(2) is accompanied by any amendment, affidavit or other evidence, it shall be treated as a request that prosecution be reopened before the primary examiner under 37 CFR 41.39(b)(1).

Extensions of time under 37 CFR 1.136(a) are not applicable to the TWO MONTH time period set forth above. See 37 CFR 1.136(b) for extensions of time to reply for patent applications and 37 CFR 1.550(c) for extensions of time to reply for ex parte reexamination proceedings.

Respectfully submitted,

Mylinh Tran

Patent Examiner, AU 2179

Conferees:

Ba Huynh

Primary Examiner, AU 2179

SPÉ. Stephen Hong

Appeal Panel Member